

REMARKS

The applicant appreciates the Examiner's thorough examination of the application and requests reexamination and reconsideration of the application in view of the preceding amendments and the following remarks.

The Examiner rejects claims 1-7, 10, 12, 16-20 and 24-33 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 3,258,595 to Galante in view of JP Publication 06-141211 to Sosoya. The applicant has cancelled claims 32 and 33 through the above amendments, which renders the rejection of these claims moot.

Claim 1 of the subject application is directed to a photonic buoy comprising a lengthy hull including a ballast portion of the hull which resides below the waterline and a top portion of the hull which is disposed above the waterline, an optical bench including an imager within the top portion of the hull, the optical bench configured to provide a panoramic view of the horizon, and a transmission cable extending from the optical bench for transmitting video signals to a remote location.

The Examiner alleges that Galante discloses all of the elements of independent claims 1, 12 and 25, except for the optical bench configured to provide a panoramic view of the horizon and a transmission cable extending from the optical bench for transmitting video signals to a remote location. The Examiner further alleges that Sosoya discloses the elements not present in Galante and that it would have been obvious to combine the elements of Sosoya into the device of Galante.

However, the applicant submits that it would not have been obvious to include the transmission cable of Sosoya with the device of Galante. Galante is directed to a remotely operated self-powered observation device including remotely controllable visual scanning

means. The observation device of Galante utilizes laser communication means for relaying information back and forth between a submarine and the observation device. See Col. 4, lines 64-75 of Galante. The disclosure of Galante states that the device of Galante relates to “new and novel remotely controlled observation means, and more particularly to an observation means which is adapted for movement through water and which utilizes a laser beam for communication with a remote control station”. (emphasis added) Col. 1, lines 9-13 of Galante.

Galante further states that “[t]he present invention employs a novel communication system in the form of a laser means wherein a laser beam is utilized for transmitting signals from a remote control station to the apparatus of the present invention and vice versa.” Col. 1, lines 62-66.

It is clear that Galante is directed to, and solely discloses, the use of a laser beam for communication with a remote control station. There is no motivation, teaching or suggestion in Galante to include a transmission cable as claimed by the applicant. Indeed, Galante teaches away from the use of a transmission cable as claimed by the applicant.

With regard to obviousness, the law is clear that:

Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination. ACS Hospital System, Inc. v. Montefiore Hospital, 732 F2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984).

The applicant submits that Galante is devoid of any motivation, disclosure, teaching, suggestion or incentive to include the transmission cable of Sosoya. As noted above, Galante is directed to the use of a “novel communication system in the form of a laser means.” As such, Galante teaches away from including a transmission cable in place of the laser means.

Accordingly, independent claims 1, 12 and 25, and their respective dependent claims are

patentable over the references.

Additionally, independent claim 12 and new independent claim 34 include the feature of a workstation remote from the hull, responsive to the optical bench, and including a display and image stabilization circuitry for presenting a composite image of the horizon on the display. The Examiner states that Galante discloses a workstation 110 remote from the hull including a display 112 and image stabilization circuitry 70. However, remote control center 70 of Galante is actually located within the observation device of Galante, and is not contained in a remote workstation as claimed by the applicant.

Galante states that the remote control system 70 is incorporated within the observation device. *See* Col. 1, lines 40-44 of Galante. Galante further states that remote control center 70 is connected to rudder control means 72, speed control means 74, surface control means 76, gyrocontrol means 78, and destroy control means 80, all of which are contained within the observation device. *See* Col. 3, lines 39-46; Col. 5, lines 16-23 and Fig. 3 of Galante.

Further, Galante states that the various elements of the remote control circuit are each adapted to receive electrical power from main power plant 16, which is contained within the observation device. *See* Col. 5, lines 64-68, Col. 3, lines 34-35 and Fig. 3 of Galante.

Accordingly, the applicant submits that Galante fails to disclose a workstation remote from the hull which includes image stabilization circuitry as claimed by the applicant. Therefore, the combination of references fails to result in the applicant's claimed invention, and independent claims 12 and 34 and their respective dependent claims are patentable over the cited references.

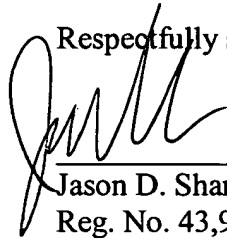
The Examiner also rejects claims 8-9, 13-14 and 22-23 under 35 U.S.C. §103(a) as unpatentable over Galante in view of Sosoya and U.S. Patent No. 4,794,575 and claim 15 under 35 U.S.C. §103(a) as unpatentable over Galante in view of Sosoya and U.S. Patent No. 5,973,733

to Gove. However, independent claims 1, 12 and 25 are patentable for at least the reasons set forth above. Accordingly, dependent claims 8-9, 11, 13-15 and 22-23 are patentable over the references for at least these reasons.

Each of the Examiner's rejections has been addressed or traversed. Accordingly, it is respectfully submitted that the application is in condition for allowance. Early and favorable action is respectfully requested.

If for any reason this Response is found to be incomplete, or if at any time it appears that a telephone conference with counsel would help advance prosecution, please telephone the undersigned or his associates, collect in Waltham, Massachusetts, at (781) 890-5678.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'JDS', is written over a horizontal line.

Jason D. Shanske
Reg. No. 43,915